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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,108	03/31/2006	Peter Herold	2006-0446A	7425
513 7590 09/22/2009 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503				
EXAMINER				
HABTE, KAHISAY				
ART UNIT		PAPER NUMBER		
1624				
MAIL DATE		DELIVERY MODE		
09/22/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/574,108

**Applicant(s)**

HEROLD ET AL.

**Examiner**

Kahsay T. Habte

**Art Unit**

1624

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on July 27, 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 11-21 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 11-21 are pending in this application.
2. The Restriction Requirement mailed on 08/18/2009 is vacated. This Restriction Requirement replaces the earlier Restriction Requirement. Applicant's petition from the Restriction Requirement submitted on 07/27/2009 has been granted on 08/13/2009. Upon further review of the Restriction Requirement (09/19/2008) and the petition decision, it is deemed necessary to modify the original Restriction Requirement (election of species) that was not applicable to national stage filing of a PCT application (35 USC 371) .
3. The finality of the rejection of the last Office action (04/27/2009) is withdrawn. The withdrawal is due to the Petition Decision dated 08/13/2009.
4. The obviousness-type double patenting rejection raised in previous Office Action (04/27/2009) over copending applications 11/887,227 and 12/076,221 has been withdrawn. The instant claims 11-21 don't contain a variable R group that is attached to the 2-position of the piperidine ring and is not obvious over copending applications 11/887,227 and 12/076,221. Note that rejection was raised in part because the filing date in the Bib data sheet for 11/887,227 shows as 01/01/0001 that is incorrect.

## Continuity/Reexam Information for 11/887227

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### Parent Data

11887227, filed 01/01/0001 is a national stage entry of PCT/EP2006/061197, International Filing Date: 03/30/2006  
PCT/EP2006/061197 Claims Priority from Provisional Application 60666556, filed 03/31/2005  
PCT/EP2006/061197 Claims Priority from Provisional Application 60750853, filed 12/16/2005

### Child Data

12076221, filed on 03/14/2008 is a division of 11887227, filed on 01/01/0001

### *Election/Restrictions*

5. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

- a. Benzo[1,4]oxazine and benzo[1,3]oxazine species with linkers X or/and Z = O-CHR11 or OCO and  $R^2$  = substituted phenyl (see for example compounds 2, 5, or 320-33).
- b. Quinoline species with linkers X or/and Z = OCHR11 or OCO and  $R^2$  = substituted phenyl (see for example compounds 46 or 48-50).
- c. Indole species and spiro fused indole species with linkers X or/and Z = O-CHR11 or OCO and  $R^2$  = substituted phenyl (see for example compounds 58-60).
- d. Benzoxazole species with linkers X or/and Z = OCHR11 or OCO and  $R^2$  = substituted phenyl (see for example compound of Example 6).
- e. Benzo[1,4]thiazine species with linkers X or/and Z = OCHR11 and  $R^2$  = substituted phenyl (see for example compound 245).
- f. Benzodiazole species with linkers X or/and Z = O-CH<sub>2</sub>-CH<sub>2</sub>-O- and  $R^2$  = substituted phenyl (see for example compound of Example 6).

g. Other heterocyclic species in the definition of  $R^1$  that are not listed in (a-f),  $R^2$  = substituted phenyl, X = bond and n = 0 (i.e.  $R^1$  is directly bonded to piperidine core structure).

h. Other heterocyclic species in the definition of  $R^1$  that are not listed in (a-f),  $R^2$  = substituted phenyl, X = bond and n = 1 and Z = C1-C6 alkylene, C2-C6-alkenylene and hydroxy-C1-6-alkylidene.

i. Other heterocyclic species that are not listed in (a-h).

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The species listed in (a) correspond to claims 11-15 and 18-21; species listed in (b) correspond to claims 11-13, 15 and 19-21; species listed in (c) correspond to claims 11-15 and 19-21; species listed in (d) corresponds to claims 11-13, 15 and 19-21; species listed in (e) correspond to claims 11-15 and 19-21; species listed in (f) correspond to claims 11-13, 15-17 and 19-21; other heterocyclic species listed in (g) that are not

listed in (a-f) correspond to 11-12, 15 and 19-21; other heterocyclic species listed in (h) that are not listed in (a-f) correspond to claims 11-12, 14-15, 17 and 19-21; and other heterocyclic species listed in (i) that are not listed in (a-h) correspond to claims 11-13, 15-17 and 19-21.

The following claim(s) are generic: Claims 11 and 19-21 are generic.

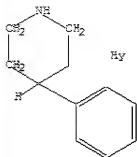
The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The examiner asserts that the corresponding species of (a- i) lack a common nucleus or core. Different definitions of variables  $R^1$ ,  $R^2$ , X, Z and n result in many permutations. Note that the heterocyclic rings in the definition of  $R^1$  together with the definition of the linkers X and Z and variable  $R^2$  result in compounds that have achieved a different status in the art, and thus are drawn to an improper Markush group on the grounds of lack of a common nucleus. Thus, lack of unity is apparent.

A preliminary search of a selected core gave numerous iterations, see below:

=>  
Uploading C:\Program Files\Stnexp\Queries\10574108a.str

L1            STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1            SIR



Structure attributes must be viewed using STN Express query preparation.

=> s 11  
SAMPLE SEARCH INITIATED 09:20:35 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED -    97887 TO ITERATE

2.1% PROCESSED        2000 ITERATIONS                    0 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:    ONLINE    \*\*COMPLETE\*\*  
                              BATCH    \*\*COMPLETE\*\*  
PROJECTED ITERATIONS:        1928186 TO 1965294  
PROJECTED ANSWERS:                0 TO            0

L2            0 SEA 333 SAM L1

In addition to the R<sup>2</sup> = phenyl attached at the para-position attached to the piperidine ring in the preliminary search above, R<sup>2</sup> can be also the following: C1-6-alkylenedioxy group or L1-T1.....U radical. Thus it is clear that applicant's compound core is not applicant's contribution over the prior art and the commonly shared structure does not

constitute a structurally distinctive portion in view of the existing prior art. Thus, there is lack of unity.

A telephone call was made to Mr. Michael Davis on 09/04/2009 and 09/08/2009 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kahsay Habte whose telephone number is (571) 272-0667. The examiner can normally be reached on M-F (9.00AM- 5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached at (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kahsay T. Habte/  
Primary Examiner, Art Unit 1624

**/James O. Wilson/  
Supervisory Patent Examiner, Art Unit 1624**

September 22, 2009